

Ames Public Library @HOME Activities

The Solar System

Our Solar System includes the sun, the planets, moons, asteroids, meteoroids, and comets.

The Earth is part of the Solar system. The sun is at the center of the Solar system and everything in our Solar system revolves around it.

See a related video on the Library's YouTube Channel at <http://bit.ly/APLvideos>.

Books and Media:

Title	Author / Performer	Call Number
<i>Space</i>	Holland, Simon	J 520 HOL
<i>Little kids First Big Book of Space</i>	Hughes, Catherine D.	J 520 HUG
<i>Everything Space</i>	Becker, Helaine	J 520 SEC
<i>Astronomy for Every Kid</i>	VanCleave, Jan	J 520 VAN
<i>Is There Life On Other Planets? And Other Questions About Space</i>	Vogt, Gregory	J 520 VOG
<i>We're The Center of the Universe!</i>	Zuchora-Walske, Christine	J 520 ZUC
<i>Space Dictionary for Kids</i>	Anderson, A & Anderson, B	J 520.3 AND
<i>Astronomy Lab for Kids</i>	Nichols, Michelle	J 520.78 AST
<i>DK Findout! Universe</i>	(DK)	J 523.1 SPA
<i>Solar System By The Numbers: A Book of Infographics</i>	Jenkins, Steve	J 523.2 JEN
<i>iSolar System</i>	McCarthy, Eliza	J 523.2 MCC
<i>Cars on Mars – Roving the Red Planet</i>	Siy, Alexander	J 523.4 SIY
<i>Seeing Stars</i>	Gillingham, Sara	J 523.8 GIL
<i>Rachel & the TreeSchoolers (DVD). – Our Solar System</i>	(Disney)	J 523.3 (DVD) RAC
<i>Planets (DVD)</i>	Nye, Bill	J 523.4 (DVD) NYE
<i>The Cat in the Hat knows a lot about that (DVD). Space is the Place!</i>	(Schlessinger Media)	J 537 (DVD) WAY

Websites:

URL	Notes
https://solarsystem.nasa.gov/planets/overview/	<i>This is an interactive page that has great information on the solar system.</i>
http://www.nakedeyplanets.com/	<i>This site has a lot of information about how planets move against the background of the stars.</i>

Vocabulary

Asteroid – A lump of rock or metal without an atmosphere that orbits the Sun.

Comet – A small body, of mostly ice and dust, in orbit around the Sun or passing through the solar system in large orbits.

Exoplanets – Extra-solar planets. The planets in our solar system orbit the sun, planets that are orbiting other stars or suns are called exoplanets.

Gravity – The force that pulls things towards each other.

Milky Way – The galaxy of stars that includes our solar system.

Astronomer – Someone who studies the stars and the planets.

Astronaut – Someone who visits and explores space.

Galaxy – Billions of stars, gas, and dust held together by gravity

NASA – National Aeronautics and Space Administration. NASA is a U.S. government agency that is responsible for science and technology related to air and space.

Orbit – In astronomy this is the path of a body revolving around an attracting center of mass, as a planet around the Sun or a satellite around a planet.

Goldilocks zone – The habitable zone where plants are neither too hot nor too cold, with conditions just right for water to remain liquid.

Extraterrestrial Intelligence – This refers to intelligent life out in the universe.

Satellite – A free-flying object that orbits the Earth, another planet, or the sun.

Moon – An object that orbits a planet.

Star – A ball of very hot gas giving off the energy that creates light. The sun is a star.

Revolution – Is the movement of the planet around the sun.

Universe – A space formed by the Big Bang, which includes everything that exists.

Take Away Kit: Solar System kit

Bag Contents:

- Solar system kit
- 4-pack crayon

The Solar system kit contains the planets and hooks to link them together. You can decorate the Sun and the planets with the crayons provided. Once you are done, you can hook them together in order. The order of the planets are:

(Sun) is a star

The inner, rocky planets -

Mercury – This is the fastest planet, it zips around the Sun in 88 Earth days.

Venus – The thick atmosphere on Venus makes it the hottest planet.

Earth – The only planet with liquid water on the surface.

Mars – Billions of years ago, Mars was a wet and warm planet.

The gas giants -

Jupiter – The largest planet, its dark red spot is a storm that is larger than the Earth.

Saturn – This planet has the brightest, most massive and most complex ring system.

The ice giants -

Uranus – Uranus is tipped on its axis by almost 90-degrees.

Neptune – Neptune is the coldest planet.

Sources:

NASA (National Aeronautics and Space Administration). <https://www.nasa.gov/>

Space Dictionary for Kids by Anderson, A & Anderson, B (J 520.3 AND)